

New *Malayaplamius* (Coleoptera, Tenebrionidae) from Southeast Asia

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Abstract Six new species of the genus *Malayaplamius* are described under the names *Malayaplamius luteifemoralis* sp. nov., *M. becvari* sp. nov., *M. fajar* sp. nov., *M. malayensis* sp. nov., *M. baehri* sp. nov. and *M. borneensis* sp. nov. A key to all the species of the genus *Malayaplamius* including the new species is also provided.

Members of the genus *Malayaplamius* are related to those of the genus *Plamius* FAIRMAIRE, 1896, but can be distinguished from the latter by the body more strongly convex above, with the head noticeably deeply grooved in lateral parts, the area between the grooves rather strongly raised, and the eyes rather small and often strongly projected laterad. Five species have hitherto been known from Borneo and the Malay Peninsula.

On occasions of our researching trips to Europe in 2003 and 2004, we were offered materials of this genus from Dr. Wolfgang SCHAWALLER, Staatliches Museum für Naturkunde, Stuttgart, Ing. Stanislav BEČVÁŘ, Czech Republic, and Dr. Martin BAEHR, Zoologische Staatssammlung, München. After a careful study of the materials, we have concluded that they include some species new to science. Thus, we are going to describe them as new species.

We wish to express our acknowledgement to the above persons for their permission to examine the invaluable materials, and we thank Dr. Ottó MERKL, the Hungarian Natural History Museum, Budapest, for loaning some holotypes for comparison, and also thank Dr. Makoto KIUCHI, Tsukuba City, for taking very clear photographs inserted in this paper.

The abbreviations used herein are as follows: NSMP: Natural Science Museum, Prague; NHMW: Naturhistorisches Museum, Wien; NSMT: National Science Museum (Nat. Hist.), Tokyo; SMNS: Staatliches Museum für Naturkunde, Stuttgart; ZSM: Zoologische Staatssammlung, München.

Malayaplamius MASUMOTO, 1986

Malayaplamius MASUMOTO, 1986, *Elytra, Tokyo*, **14**: 17. Type species: *Malayaplamius sakaii* MASUMOTO, 1986.

Malayaplamius luteifemoralis sp. nov.

(Fig. 5)

Female. Head, pronotum, scutellum, ventral parts and legs except for major parts of femora bluish black, elytra including epipleura dark blue, femora except for apical parts yellowish brown; head, pronotum and scutellum weakly, sericeously shining, elytra strongly metallicly shining, ventral surface weakly, rather alutaceously shining, each surface almost glabrous. Body oblong-ovate, strongly convex dorsad.

Head semicircular, covered with isodiametric microsculpture, punctulate, with clypeus and genae continuously depressed; clypeus triangular, feebly raised in postero-medial part, subtruncate in front, fronto-clypeal border bisinuous and finely sulcate; genae feebly depressed in areas before eyes, with exterior margins obtusely angulate; frons strongly raised posteriad and continuing to vertex, deeply sulcate along lateral margins of the elevation, with a rather noticeable groove along median line, diatone about 2.5 times the width of transverse diameter of an eye. Eyes subcordate, rather roundly convex laterad, roundly, slightly obliquely inlaid into head. Antennae clavate, reaching basal 1/5 of pronotum, six apical segments flattened, segment X widest, ratio of the length of each segment from base to apex: 0.09, 0.05, 0.08, 0.07, 0.06, 0.07, 0.06, 0.07, 0.08, 0.09, 0.13.

Pronotum somewhat short barrel-shaped in dorsal view, 1.21 times as wide as long, widest at the middle; apex rather strongly produced anteriorly, not bordered; base weakly produced in middle, sinuous on each side, finely bordered; sides rather steeply declined to lateral margins, which are finely rimmed and crenulate; front angles obtuse, hind angles nearly rectangular; disc strongly convex, highest at apical 2/5, feebly covered with isodiametric microsculpture, scattered with small punctures, which are almost of the same size as those on frons, each with a fine hair. Scutellum subcordate, feebly covered with isodiametric microsculpture, broadly depressed in medial part, microscopically, somewhat transversely impressed, sparsely scattered with microscopic punctures.

Elytra subovate, 1.57 times as long as wide, 2.76 times the length and 1.55 times the width of pronotum, widest at apical 2/5; dorsum strongly convex in posterior 4/5, highest at the middle, obliquely depressed in area around basal 1/4, weakly, somewhat transversely raised in basal 1/7 (areas before the oblique depressions); disc finely punctato-striate, the punctures in striae small, 5th stria stronger than the others close to base; intervals gently convex, almost smooth, sparsely punctulate, which are much smaller than those on pronotum; lateral margins bordered by grooves and fine rims; humeral parts swollen; apices weakly produced.

Legs without modification; femora punctate; tibiae rather noticeably covered with longitudinal sculpture; ratios of the lengths of pro-, meso- and metatarsal segments: 0.09, 0.05, 0.05, 0.08, 0.38; 0.09, 0.07, 0.06, 0.08, 0.40; 0.18, 0.08, 0.08, 0.42.

Body length: 5.28 mm.

Holotype: ♀, "Malaysia, Benom Mts., 15 km E. Kamopong Dong, 700 m, 3.53 N,

102.01 E, 1–IV–1998, DEMBICKÝ & PACHOLÁTKO leg.” (NSMP).

Notes. This new species somewhat resembles *Malayaplamius schawalleri* UTSUNOMIYA et MASUMOTO, 2001, and *M. uenoi* MASUMOTO, 1986, both from Borneo, but can be distinguished from the latter two by the body not obviously widened posteriad but rather subparallel-sided, the femora yellowish brown in major basal parts, and the head strongly raised in medial and posterior parts, and gently grooved longitudinally.

***Malayaplamius becvari* sp. nov.**

(Figs. 7, 12)

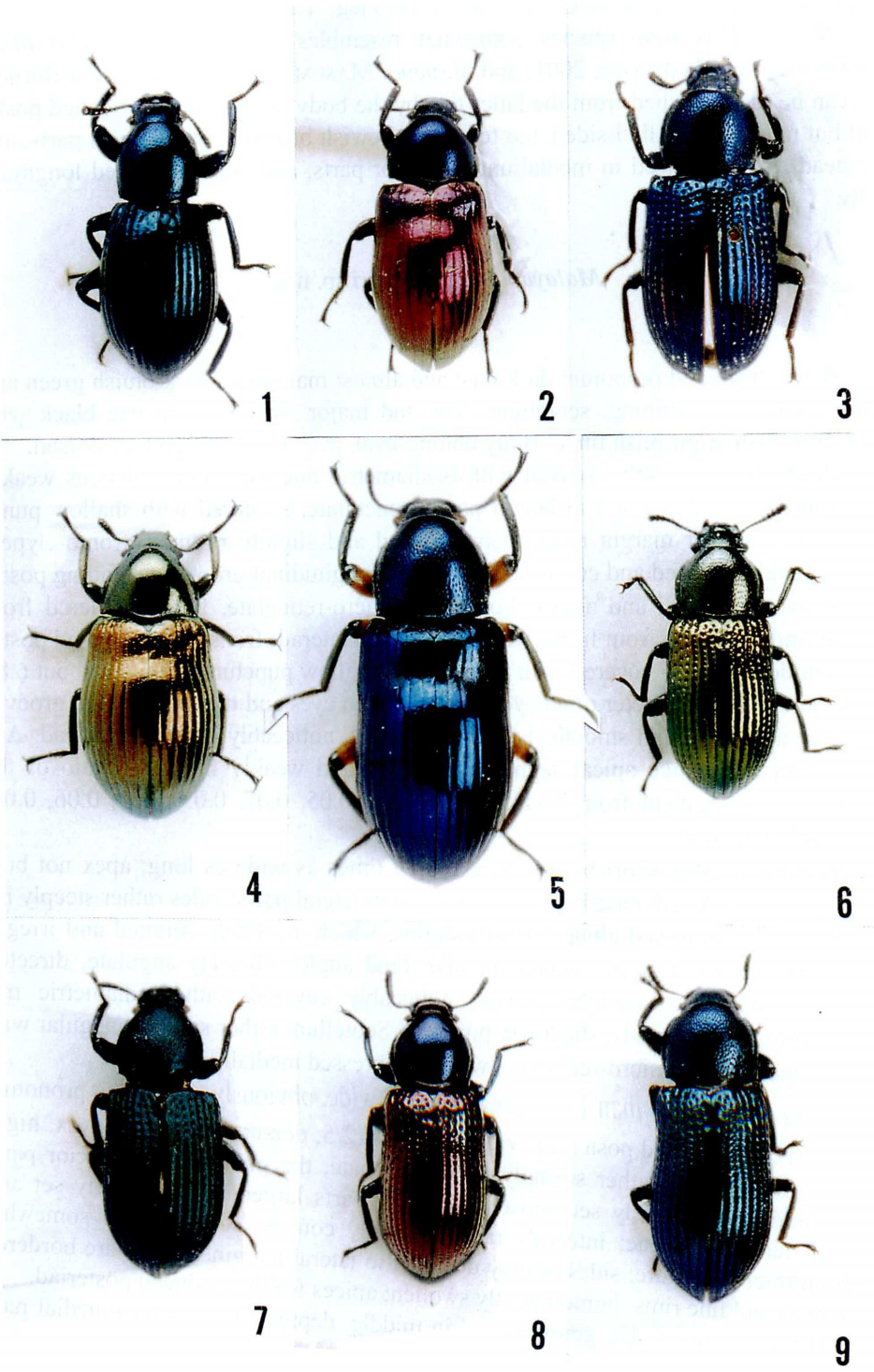
Black, head and pronotum dark blue and almost mat, elytra dark bluish green and gently sericeously shining, scutellum, legs and major parts of antennae black with weak brownish or purplish tinge. Body oblong-oval, rather strongly convex dorsad.

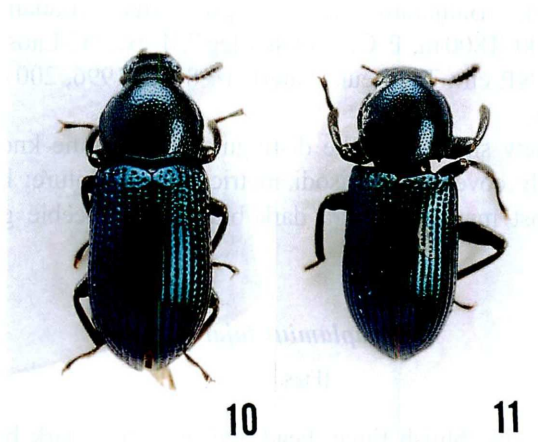
Head rather coarsely covered with isodiametric microsculpture; clypeus weakly raised in middle, depressed in lateral parts, punctulate, scattered with shallow punctures, with exterior margin moderately rounded and slightly rimmed, fronto-clypeal border weakly grooved and connected with deep longitudinal grooves extending posteriad; genae depressed and almost horizontal, micro-reticulate, finely bordered from clypeus and deeply so from frons, weakly produced laterad; frons broadly raised posteriad in middle, closely covered with rather large, shallow punctures, diameter about 6.80 times the width of diameter of an eye; areas between eyes and the longitudinal grooves obliquely depressed and smooth. Eyes rather small, noticeably produced laterad. Antennae subclavate, five apical segments widened and weakly flattened; ratio of the length of each segment from base to apex: 0.10, 0.05, 0.07, 0.05, 0.05, 0.06, 0.07, 0.08, 0.08, 0.08, 0.11.

Pronotum rather short barrel-shaped, 1.19 times as wide as long; apex not bordered, feebly produced; base bisinuous, rimmed in lateral parts; sides rather steeply inclined, weakly depressed along lateral margins, which are finely rimmed and irregularly crenulate; front angles subrectangular, hind angles obtusely angulate, directed postero-laterad; disc strongly convex, noticeably covered with isodiametric microsculpture, rather closely, shallowly punctate. Scutellum rather small, triangular with rounded apex, feebly micro-reticulate, weakly depressed medially.

Elytra slightly less than 1.4 times as long as wide, obviously wider than pronotum at bases, feebly widened posteriad, widest at apical 2/5; dorsum strongly convex, highest at basal 1/4; disc rather strongly punctato-striate, the punctures in interior parts smaller and rather closely set, those in exterior parts larger, more sparsely set and forming quadrate foveae; intervals rather strongly convex, covered with somewhat scaphoid microsculpture; sides steeply declined to lateral margins, which are bordered by grooves and fine rims; humeri gently swollen; apices feebly produced posteriad.

Mentum semicircular, gently raised in middle, depressed in postero-medial part,





Figs. 10–11. Habitus of *Malayaplamius* spp. — 10, *M. baehri* sp. nov., holotype, ♂; 11, *M. borneensis* sp. nov., holotype, ♀.

with small numbers of long hairs; terminal segment of maxillary palpus subsecuriform in male, with exterior side longest and rounded, apical side nearly straight, and interior side nearly straight and about half the length of exterior side.

Abdomen smooth in medial parts, covered with isodiametric microsculpture in lateral parts, strongly punctate, the punctures in two basal sternites and medial part of the third rather strong, those in the remaining parts becoming smaller; postero-lateral parts of penultimate segment produced; anal sternite with simply rounded apex.

Legs rather stout; profemur with upper and lower edges along front face; protibia rather short, gently curved intero-ventrad, with a fine hook at apex of ventral side; tarsi rather long as compared with tibiae, ratios of the lengths of pro-, meso- and metatarsal segments: 0.07, 0.04, 0.05, 0.04, 0.31; 0.07, 0.04, 0.06, 0.05, 0.33; 0.09, 0.05, 0.06, 0.42; claws medium-sized and falciform.

Male genitalia elongated subfusiform, 0.65 mm in length, 0.13 mm in width, basal piece gently curved in lateral view; lateral lobes elongated triangular, 0.30 mm in length, weakly curved in lateral view, with apices bluntly pointed.

Body length: 4.4–4.9 mm.

Holotype: ♂, “W. Malaysia, Pahang, Baniaran Benom Mts., K. Ulu Dono, 10–15 km SSE, 17~23–IV–1997, D. HAUCK leg.” (NSMP). Paratypes: 2 exs., same data as for the holotype, 2 exs., “Malaysia, Benom Mts., 15 km E Kampong Dong, 700 m, 3.53 N, 102.01 E, 1–IV–1998, DEMBICKÝ & PACHOLÁTKO leg.”, 1 ex., “W.

Figs. 1–9 (on p. 168). Habitus of *Malayaplamius* spp. — 1, *M. sakaii* MASUMOTO, paratype, ♂; 2, *M. uenoi* MASUMOTO, holotype, ♂; 3, *M. kaszabi* MASUMOTO, holotype, ♀; 4, *M. schawallari* UT-SUNOMIYA et MASUMOTO, holotype, ♂; 5, *M. luteifemoralis* sp. nov., holotype, ♀; 6, *M. bremeri* MASUMOTO, holotype, ♂; 7, *M. becvari* sp. nov., holotype, ♂; 8, *M. fajar* sp. nov., holotype, ♂; 9, *M. malayensis* sp. nov., holotype, ♀.

Malaysia, Kelantan, Banjaran Titi Wangsa Mts., Ladang Pandrak env., 9~11-IV-1997, 1500–1800 m, P. ČECHOVSKÝ leg.”; 1 ex., “C-Laos: Prov. Viangchian, Phou Khao Khouay NP, env. Tad Leuk Waterf. 1~8-VI-1996, 200 m, leg. SCHILLHAMMER (15)” (NHMW).

Notes. This new species can be distinguished from the known species by the dorsal surface wholly covered with isodiametric microsculpture; head and pronotum dark blue and almost mat, and elytra dark blue with a feeble greenish tinge, and sericeously shining.

Malayaplamius fajar sp. nov.

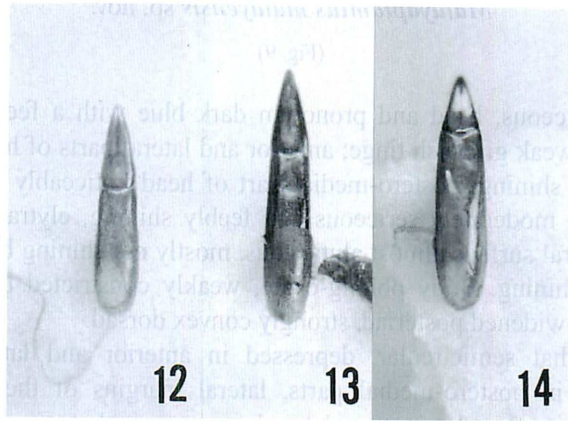
(Figs. 8, 13)

Black with a feeble bluish tinge, head and pronotum dark blue, elytra purplish with basal areas somewhat violet under a certain light, antennae and tibiae brownish black, apical parts of femora and tibiae with a dark greenish tinge; head, pronotum and scutellum rather strongly shining, elytra strongly, metallicly shining; ventral surface rather alutaceous. Body oblong-ovate, rather strongly convex dorsad.

Head subdecagonal, raised posteriad, with distinct longitudinal grooves in lateral parts along borders between interior parts of head (frons and vertex) and exterior parts (genae); clypeus transverse, feebly convex in middle, depressed in lateral parts, moderately punctulate, with apical margin truncate in middle and rounded in lateral parts, fronto-clypeal border finely, transversely sulcate, feebly sinuous on each side; genae almost horizontal, finely, obliquely bordered from clypeus, subrectangularly produced laterad, scattered with small punctures; frons broadly raised and smoothly continuing to vertex, scattered with shallow, somewhat ovate punctures, each with a short bent hair, distance between eyes about five times the width of diameter of an eye; areas between eyes and longitudinal grooves rather steeply inclined, punctulate in anterior parts, smooth in posterior parts. Eyes noticeably protruded laterad, rather weakly inlaid into head. Antennae subclavate, five apical segments widened and weakly flattened; ratio of the length of each segment from base to apex: 0.07, 0.04, 0.05, 0.04, 0.05, 0.05, 0.08, 0.07, 0.09, 0.08, 0.10.

Pronotum somewhat barrel-shaped, 1.21 times as wide as long; apex not bordered, feebly produced; base bisinuous, boldly bordered; sides rather steeply inclined laterad, boldly grooved along lateral margins, which are finely rimmed and irregularly crenate; front angles obtuse, hind angles subrectangular; disc strongly convex, irregularly scattered with shallow punctures. Scutellum triangular, feebly elevated, smooth.

Elytra subovate, 1.56 times as long as wide, 2.73 times the length and 1.29 times the width of pronotum, gently widened posteriad, widest slightly after the middle, roundly narrowed apicad; dorsum strongly convex, highest at basal 2/5, gently, obliquely depressed in areas from basal 1/5 (near suture) to basal 2/5 (near lateral margins); disc with rows of punctures, those in interior parts small, rather closely set and



Figs. 12–14. Dorsal view of male genitalia. — 12, *Malayaplamius becvari* sp. nov.; 13, *Malayaplamius fajar* sp. nov.; 14, *Malayaplamius baehri* sp. nov.

weakly striate, those in exterior parts larger, more sparsely set and often forming foveae; intervals weakly convex in interior part and strongly so in exterior and posterior parts, sparsely punctulate, weakly, rather transversely aciculate; sides steeply declined to lateral margins, which are bordered by grooves with punctures and finely rimmed; humeri gently swollen; apices feebly produced.

Mentum subhexagonal, longitudinally ridged in medial part, depressed in posterior part; maxillary palpus lost in the type specimen; labial palpi ovate; gula subelliptical, transversely sculptured.

Abdomen strongly punctate, the punctures in two basal sternites and medial part of the third rather large, those in the remaining parts becoming smaller; lateral margins of penultimate segment rounded; anal sternite with simply rounded apex.

Legs rather stout; femora with upper and lower edges along interior faces; protibiae rather short, gently curved intero-ventrad, with interior faces weakly gouged in medial part; tarsi rather long as compared with tibiae, ratios of the lengths of pro-, meso- and metatarsal segments: 0.08, 0.04, 0.04, 0.05, 0.28; 0.07, 0.04, 0.04, 0.05, 0.29; 0.15, 0.05, 0.05, 0.27.

Male genitalia elongated fusiform, 0.85 mm in length and 0.14 mm in width, feebly curved in lateral view; fused lateral lobes weakly elongated triangular in dorsal view, 0.03 mm in length, with slightly rounded apices.

Body length: 3.80 mm.

Holotype: ♂, “Kimanis, nr. Keningau, N. Borneo, III~V-1983, M. ITOH” (NSMT).

Notes. This new species somewhat resembles *M. bremeri* MASUMOTO, 1998, from Borneo, but can be distinguished from the latter by the body slenderer, the elytral intervals less strongly convex, and the dorsal surface less strongly punctate with different coloration.

Malayaplamius malayensis sp. nov.

(Fig. 9)

Female. Piceous, head and pronotum dark blue with a feeble greyish tinge, elytra blue with a weak greenish tinge; anterior and lateral parts of head and scutellum weakly, vitreously shining, postero-medial part of head noticeably sericeous and not shining, pronotum moderately sericeous and feebly shining, elytra strongly, metallically shining, ventral surface almost alutaceous, mostly not shining but medial parts of abdomen gently shining. Body oblong-ovate, weakly constricted between pronotum and elytra, weakly widened posteriad, strongly convex dorsad.

Head somewhat semicircular, depressed in anterior and lateral parts, rather strongly elevated in postero-medial parts, lateral margins of the elevation deeply grooved, the exterior edges being crenulate; clypeus somewhat transversely hexagonal, feebly convex in postero-medial part, irregularly punctulate, weakly covered with isodiametric microsculpture in apical part, weakly truncate at apex, lateral parts of the truncation roundly curved posteriad, fronto-clypeal border nearly straight and each lateral end connected with fronto-genal sulcus, and also with lateral groove, which extends to lateral part of occiput; genae (areas before eyes) feebly depressed, shallowly, sparsely ruguloso-punctulate in exterior parts, almost impunctate and smooth in interior parts, with exterior margins weakly produced, genae (areas behind eyes) rather steeply inclined, impunctate and smooth; frons noticeably raised, smoothly continued and widened posteriad, noticeably covered with isodiametric microsculpture, rather closely scattered with shallow coarse punctures. Eyes medium-sized, gently protruded laterad, rather weakly roundly inlaid into head, distance between them about six times their own diameter. Antennae somewhat clavate, reaching basal 1/4 of pronotum, five apical segments noticeably widened and flattened, 9th the widest, 11th nearly round, rough-surfaced and with trichoid sensillae in apical 1/4, ratio of the length of each segment from base to apex: 0.11, 0.04, 0.06, 0.04, 0.04, 0.04, 0.06, 0.06, 0.08, 0.07, 0.09.

Pronotum wider than long (4:3), widest at the middle, roundly narrowed towards base and apex, the former slightly wider than the latter; apex feebly produced and arched, not bordered; base weakly produced in middle, slightly sinuous in lateral parts, clearly bordered and rimmed, the rim becoming feebly bolder in middle; sides steeply declined to lateral margins, which are weakly bordered and finely rimmed, the rim irregularly crenulate; front angles obtuse and not angulate, hind angles subrectangular; disc strongly convex, noticeably covered with isodiametric microsculpture, rather closely, shallowly punctate, the punctures in antero-medial part somewhat ovate. Scutellum sublinguiform, weakly depressed, rather flat, weakly, microscopically wrinkled.

Elytra 1.60 times as long as wide, 2.55 times the length and 1.19 times the width of pronotum, widest at the middle, weakly narrowed basad and roundly apicad; dorsum strongly convex, highest at basal 1/3, weakly, obliquely depressed laterad in basal 1/4; disc punctato-striate, the punctures in striae rather strong, often transversely impressed

across intervals, becoming larger and forming foveae in antero-lateral parts; intervals rather strongly convex, punctulate, transversely micro-aciculate in antero-lateral portions; sides steeply declined to lateral margins, punctate-grooved and finely rimmed; humeral portions gently swollen; apices feebly, roundly produced.

Legs rather short and stout; femora punctate, the punctures becoming coarser apicad; tibiae covered with elongated sculptures; ratios of the lengths of pro-, meso- and metatarsal segments: 0.08, 0.05, 0.06, 0.05, 0.18; 0.08, 0.04, 0.04, 0.05, 0.26; 0.10, 0.05, 0.07, 0.27.

Body length: 3.13 mm.

Holotype: ♀, "MALAYSIA: Benon Mts., 15 km E Kampong Dong, 700 m, 3°53'N, 102°01'E, 1–IV–1998, DEMBICKÝ & PACHOLÁTKO leg." (NSMP); 1 ex., "(Near K. Bahru), Selangor, Malaysia, 27–III–1976, Coll. K. SAKAI" (paratype of *M. kaszabi* MASUMOTO, 1998).

Notes. This new species somewhat resembles *Malayaplamius kaszabi* MASUMOTO, 1986, from Borneo, but can be distinguished from the latter by the body slenderer, head more widely elevated in postero-medial part, with exterior margins of longitudinal grooves along the elevation not so noticeably crenate, and the pronotum covered with isodiametric microsculpture, with the humeral parts not noticeably swollen.

Malayaplamius baehri sp. nov.

(Figs. 10, 14)

Piceous, head, pronotum and scutellum dark blue, elytra dark greenish blue, antennae with five basal segments and apical halves of terminal segments, mouth parts and claws dark brown; head, pronotum and scutellum rather vitreously shining, elytra strongly, metallically shining, ventral surface rather alutaceous. Body oblong-ovate, weakly constricted between pronotum and elytra, strongly convex dorsad.

Head somewhat semicircular, rather strongly elevated in postero-medial portion; clypeus widely trapezoidal, feebly convex in middle, irregularly punctulate, weakly truncate at apex, roundly curved in lateral parts of the truncation, fronto-clypeal border shallowly sulcate, the sulcus weakly curved anteriad and connected with fronto-genal sulci, and also with deep longitudinal grooves along margins of postero-medial elevation, which extend to the posterior parts of head; genae (areas before eyes) gently depressed, punctulate in exterior parts, sparsely and rugoso-punctate in interior parts, with exterior margins roundly produced, areas between grooves and eyes finely, straightly ridged; frons broadly elevated, rather closely scattered with shallow punctures, each with a short bent hair; vertex rather sparsely punctate, the punctures larger than those on frons; occiput covered with isodiametric microsculpture and closely punctate. Eyes medium-sized and subelliptical, gently protruded laterad, roundly, feebly obliquely inlaid into head, distance between them about four times their own diameter. Antennae somewhat clavate, reaching basal 1/4 of pronotum, five apical segments

noticeably widened and flattened, 10th the widest, 11th nearly round, rough-surfaced and with trichoid sensillae in apical 2/5; ratio of the length of each segment from base to apex: 0.06, 0.04, 0.05, 0.05, 0.05, 0.04, 0.05, 0.06, 0.07, 0.09, 0.10.

Pronotum 1.36 times as wide as long, widest slightly before the middle, roundly narrowed towards base and apex, the former slightly wider than the latter; apex feebly produced and arched, not bordered; base weakly produced in middle, slightly sinuous in lateral parts, clearly bordered; sides steeply declined to lateral margins, which are clearly bordered and rimmed, irregularly crenate; front angles obtuse and not angulate, hind angles obtuse but angulate; disc strongly convex, closely and shallowly punctate, each puncture with a minute decumbent hair. Scutellum triangular, weakly covered with isodiametric microsculpture, sparsely punctulate.

Elytra 1.53 times as long as wide, 2.27 times the length and 1.13 times the width of pronotum, widest at apical 2/3, weakly narrowed basad and more strongly, roundly so apicad; dorsum strongly convex, highest at the middle, weakly, obliquely depressed in antero-lateral parts; disc punctato-striate, the punctures in striae rather strong, sometimes impressing intervals or transversely connecting with one another, becoming larger and sparser antero-laterad; intervals rather strongly convex, sparsely punctulate, transversely micro-aciculate in antero-lateral parts; sides steeply inclined, with lateral margins grooved with sparse punctures and finely rimmed; humeral portions feebly swollen; apices feebly produced.

Legs moderate-sized and simple in shape; ratios of the lengths of pro-, meso- and metatarsal segments: 0.11, 0.09, 0.07, 0.08, 0.28; 0.12, 0.05, 0.06, 0.06, 0.32; 0.12, 0.05, 0.07, 0.30.

Male genitalia subfusiform, 0.60 mm in length, 0.07 mm in width, rather strongly curved in lateral view; fused lateral lobes triangular in dorsal view, 0.34 mm in length, with prolonged, ventrally bent apices.

Body length: 4.05 mm.

Holotype: ♂, "Malaysia West, 90 km NE of IPOH; Baniaran Titi Wangsa Mt. GERAH, I~17-IV-2000, P. ČECHOVSKÝ, ex-Bremer Collection" (ZSM).

Notes. This new species somewhat resembles *M. borneensis* sp. nov., from Borneo, but can be distinguished from the latter by the eyes larger in dorsal view, the head scattered with shallow punctures in medial and posterior parts, the elytra with stria punctures transversely notching intervals, and the protibiae neither short nor stout.

***Malayaplamius borneensis* sp. nov.**

(Fig. 11)

Female. Piceous, head dark greenish blue partly with a feeble golden tinge, pronotum dark blue, elytra dark blue with a feeble greenish tinge; head with antero-lateral parts feebly metallicly shining, and interior parts almost mat, pronotum rather strongly, somewhat vitreously shining, scutellum moderately shining, elytra strongly,

metallically shining, ventral surface rather alutaceous. Body oblong, weakly constricted between pronotum and elytra, strongly convex dorsad.

Head somewhat hexagonal, depressed in anterior and lateral parts, strongly elevated in medial and posterior parts, the medial elevation with lateral margins deeply sulcate, whose exterior edges crenulate; clypeus somewhat obtrapezoidal, feebly convex in middle, weakly covered with isodiametric microsculpture, shallowly ruguloso-punctulate, weakly truncate at apex, each lateral part of the truncation rounded, fronto-clypeal border indistinctly sulcate, the sulcus feebly sinuate; genae (areas before eyes) weakly ruguloso-punctulate, with exterior margins raised and weakly produced, those in areas behind eyes rather smooth; frons raised and widened posteriad, smoothly continued to vertex, covered with isodiametric microsculpture, ruguloso-punctate, with a longitudinal medial impression from the fronto-clypeal border to the level of the mid-line of eyes. Eyes subelliptical in dorsal view, protruded laterad, roundly inlaid into head, distance between them about 3.5 times their own diameter. Antennae clavate, reaching basal 1/5 of pronotum, five apical segments noticeably widened and flattened, 10th the widest, 11th nearly round and rough-surfaced with trichoid sensillae in apical 2/5, ratio of the length of each segment from base to apex: 0.08, 0.06, 0.05, 0.04, 0.05, 0.05, 0.05, 0.07, 0.08, 0.07, 0.11.

Pronotum wider than long (6:5), widest slightly before the middle, roundly narrowed towards base and apex, the former feebly wider than the latter; apex gently produced and arched, not bordered; base weakly produced in middle, slightly sinuous in lateral parts, finely bordered and rimmed, the rim becoming bolder medially; sides steeply declined to lateral margins, which are grooved and finely rimmed, the rim irregularly crenate; front angles obtusely angulate, hind angles subrectangular; disc strongly convex, particularly so in anterior parts, covered with isodiametric microsculpture in antero-lateral parts, rather closely punctate, the punctures somewhat longitudinally ovate, each with a minute decumbent hair. Scutellum triangular, sparsely punctulate in apical part.

Elytra 1.51 times as long as wide, 2.17 times the length and 1.27 times the width of pronotum, widest at apical 3/7, feebly narrowed basad and roundly so apicad; dorsum strongly convex, highest at basal 1/3, weakly, obliquely depressed near bases; disc punctato-striate, the punctures in striae round, becoming larger and coarser laterad, distance among them being their own diameter, 5th striae impressed close to base; intervals gently convex, sparsely punctulate; sides steeply inclined, gently enveloping hind body, with lateral margins punctate-grooved and finely rimmed; humeral portions gently swollen; apices feebly, roundly produced.

Legs rather short and stout; femora closely rugoso-punctate; tibiae covered with rather longitudinal sculpture; ratios of the lengths of pro-, meso- and metatarsal segments: 0.08, 0.06, 0.07, 0.06, 0.28; 0.08, 0.04, 0.04, 0.05, 0.19; 0.09, 0.05, 0.04, 0.27.

Body length: 3.64 mm.

Holotype: ♀, "BORNEO: Sarawak, Belaga, Long Linau, 17~21-III-1990, leg. A. RIEDEL" (SMNS).

Notes. This new species somewhat resembles *Malayaplamius baehri* sp. nov., but can be distinguished from the latter by the eyes smaller in dorsal view, the head in anterior parts wrinkled, covered with microsculpture and shallow punctures in medial and posterior parts; elytra simply punctato-striate; protibiae obviously shorter and more stout.

Key to the Known Species of the Genus *Malayaplamius*

- 1 (6) Body obviously widened posteriad.
- 2 (3) Elytra strongly and simply convex above; body noticeably constricted between pronotum and elytra. Malay Peninsula. (Fig. 1) *M. sakaii* MASUMOTO
- 3 (2) Elytra noticeably convex above in posterior portion; body not so noticeably constricted between pronotum and elytra.
- 4 (5) Pronotum more strongly narrowed anteriad; elytra more strongly widened laterad; intervals more strongly convex; head, pronotum and scutellum dark greenish golden, elytra with golden purplish tinge in major parts. Borneo. (Fig. 4). *M. schawalleri* UTSUNOMIYA et MASUMOTO
- 5 (4) Pronotum less strongly narrowed anteriad; elytra less strongly widened laterad; intervals less strongly convex; head, pronotum and scutellum dark blue, elytra purple except for humeral parts blue. Borneo. (Fig. 2). *M. uenoi* MASUMOTO
- 6 (1) Body not obviously widened posteriad, rather subparallel-sided.
- 7 (8) Elytra with posterior part noticeably convex above; femora yellowish brown in major basal parts; head strongly raised in medial and posterior parts, gently grooved longitudinally. Body length: 5.28 mm. Malay Peninsula. (Fig. 5). *M. luteifemoralis* sp. nov.
- 8 (7) Elytra with posterior part not noticeably convex above; femora not yellowish brown in major basal parts (whole legs in the same coloration, mostly bluish black).
- 9(10) Dorsal surface wholly covered with isodiametric microsculpture; head and pronotum dark blue and almost mat, elytra dark blue with a feeble greenish tinge, sericeously shining. Body length: 4.4–4.9 mm. Malay Peninsula, Indochina. (Figs. 7, 12) *M. becvari* sp. nov.
- 10 (9) Dorsal surface not wholly covered with isodiametric microsculpture.
- 11(14) Dorsal surface multi-colored.
- 12(13) Body more stout; elytral intervals more strongly convex; dorsal surface more strongly punctate, head, pronotum, scutellum and posterior parts of elytra golden green, antero-interior parts of elytra with a purplish luster. Borneo. (Fig. 6) *M. bremeri* MASUMOTO
- 13(12) Body slenderer; elytral intervals less strongly convex; dorsal surface less strongly punctate; head and pronotum dark blue, elytra violet with basal parts bearing a dark greenish tinge. Borneo. Body length: 3.80 mm. (Figs. 8, 13) . .

- *M. fajar* sp. nov.
- 14(11) Dorsal surface single-colored (blue, sometimes with feeble greenish tinge).
- 15(16) Humeral parts rather noticeably swollen; head and pronotum closely punctate; exterior margins of longitudinal sulci on head noticeably crenulate. Borneo. (Fig. 3). *M. kaszabi* MASUMOTO
- 16(15) Humeral parts not noticeably swollen; exterior margins of longitudinal sulci on head not noticeably crenulate.
- 17(18) Head, except clypeus and genae, and pronotum obviously covered with isodiametric microsculpture and more coarsely punctate, the punctures somewhat elliptical. Body length: 3.13 mm. Malay Peninsula. (Fig. 9). *M. malayensis* sp. nov.
- 18(17) Pronotum not covered with isodiametric microsculpture, scattered with rather round punctures.
- 19(20) Eyes smaller in dorsal view; head in antero-medial parts ruguloso-punctate, covered with microsculpture and shallow punctures in medial and posterior parts; elytra simply punctato-striate; protibiae obviously shorter and stouter. Body length: 3.64 mm. Borneo. (Fig. 11) *M. borneensis* sp. nov.
- 20(19) Eyes larger in dorsal view; head simply punctate, the punctures rather large and shallow, each with a short hair in medial and posterior parts; elytra punctato-striate, the punctures in striae rather strong, sometimes impressing intervals, or transversely connecting with one another; protibiae neither short nor stout. Body length: 4.05 mm. Malay Peninsula. (Figs. 10, 14) *M. baehri* sp. nov.

要 約

宇都宮由佳・益本仁雄：東南アジア産 *Malayaplamius* 属の新種について（コウチュウ目ゴミムシダマシ科）。—— 東南アジアに分布する *Malayaplamius* 属の甲虫を検討し、6 新種を記載した。すなわち、*Malayaplamius luteifemoralis* sp. nov., *M. becvari* sp. nov., *M. fajar* sp. nov., *M. malayensis* sp. nov., *M. baehri* sp. nov. および *M. borneensis* sp. nov. である。これらに既知種を含め検索表を作成し、さらにすべての種を図示した。

References

- MASUMOTO, K., 1986. Tenebrionidae of East Asia (II). A new relative of the genus *Plamius* with descriptions of three new species. *Elytra, Tokyo*, **14**: 18–22.
- 1998. New tenebrionid beetles from East Asia (Coleoptera, Tenebrionidae). *Jpn. J. syst. Ent., Matsuyama*, **4**: 305–319.
- UTSUNOMIYA, Y., & K. MASUMOTO, 2001. A new *Malayaplamius* (Coleoptera, Tenebrionidae, Cnolalonini) from Southeast Asia. *Elytra, Tokyo*, **29**: 419–421.